

Summary

1. Internal combustion engine with reducing agent-generating unit and operation method for this.

2.1. An internal combustion engine with a reducing agent-generating unit (20) for the generation of an  $H_2$ -containing and/or  $NH_3$ -containing reducing gas, which can be added to the exhaust gas line (2) upstream from an  $NO_x$  reducing catalytic converter (3) is proposed, as well as a procedure for the operation of such an internal combustion engine.

2.2. According to the invention, the reducing agent-generating unit (20) consists of an  $NO_x$  generation step and an  $H_2$  generation step in serial arrangement. For the procedure, it is provided that, at least temporarily,  $NH_3$  is formed by chemical reaction by the reducing agent-generating unit (20) from  $NO_x$  produced in the  $NO_x$  generation step.

2.3. Application in motor vehicles, especially in passenger vehicles with Diesel engines.

3. Fig. 1